

REMARKS

Prior to entry of this amendment, claims 1-24 are currently pending in the subject application. Claims 12-24 are withdrawn from consideration. Claims 1 and 5 are the only pending independent claims.

Applicants appreciate the Examiner's acceptance of the drawings filed on June 30, 2006.

A. Introduction

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 5-8 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2002/0072191 to Aoki et al. ("the Aoki et al. reference"); and rejected claims 2-4 and 9-11 under 35 U.S.C. § 103(a) as being unpatentable over the Aoki et al. reference in view of U.S. Patent Publication No. 2001/00544730 to Kim et al. ("the Kim et al. reference").

B. Asserted Anticipation Rejection of Claims 1 and 5-8

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 5-8 under 35 U.S.C. § 102(b) as being anticipated by the Aoki et al. reference. The rejection is respectfully traversed for at least the following reasons.

Applicants respectfully submit that the Aoki et al. reference fails to disclose or suggest the combination of features recited in independent claims 1 and 5 including, *inter alia*,

- a lower electrode;
- a dielectric layer formed on the lower electrode; and
- an upper electrode formed on the dielectric layer,

wherein the lower electrode includes:

- a first metal layer having a cylindrical shape and defining a cylindrical space; and
- a second metal layer completely filling the cylindrical space defined by the first metal layer.

Page 3 of the Office action identifies the capacitor insulating film 7 of the Aoki et al. reference as the "dielectric layer" feature of claims 1 and 5, and the upper electrode 8 of the Aoki

et al. reference as both the “upper electrode formed on the dielectric layer” feature and the “second metal layer completely filling the cylindrical space defined by the first metal layer” feature of applicants’ independent claims 1 and 5. Applicants respectfully disagree.

Applicants claims 1 and 5 recite a dielectric layer formed on the lower electrode, including a second metal layer completely filling the cylindrical space defined by the first metal layer. The upper electrode 8 of the Aoki et al. reference cannot correspond to both the upper electrode feature and the second metal layer of the lower electrode features of claims 1 and 5. The capacitor insulating film 7 and the upper electrode 8 of the Aoki reference do not correspond to the “dielectric layer” and the “second metal layer of the lower electrode” of applicants’ claims 1 and 5, respectively, at least because the capacitor insulating film 7 is not formed on the upper electrode 8 of the Aoki et al. reference.

For at least these reasons, applicants submit that the Aoki et al. reference does not disclose or suggest the combination of features recited in independent claims 1 and 5, as well as all the features recited in claims 6-8, which directly or indirectly depend from claim 5. It is respectfully requested that the rejection be withdrawn.

C. Asserted Obviousness Rejection of Claims 2-4 and 9-11

In the outstanding Office Action Made Final, the Examiner rejected claims 2-4 and 9-11 under 35 U.S.C. § 103(a) as being unpatentable over the Aoki et al. reference in view of the Kim et al. reference. The rejection is respectfully traversed for at least the following reasons.

As discussed above with regard to independent claims 1 and 5, from which claims 204 and 9-11 respectively depend, the Aoki et al. reference fails to disclose or suggest all the features of claims 1 and 5. Applicants submit that the Kim et al. reference fails to overcome the

deficiencies of the Aoki et al. reference, as applied to claims 1 and 5. It is respectfully requested that the rejection be withdrawn.

D. Rejoinder

Upon allowance of independent device claims 1 and/or 5, applicants request rejoinder of non-elected method claims 12-24, including independent method claims 12 and 18, which recite formation of the structural features of independent device claims 1 and/or 5.

E. Conclusion

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

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PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

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If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

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